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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/540,830	03/31/2000	Jae-Min Kim	678-430(P8851)	2348

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EXAMINER

ENG, GEORGE

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 06/27/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/540,830

Applicant(s)

KIM ET AL.

Examiner

George Eng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/3/2003 (paper no. 12) has been entered.

Response to Amendment

2. This Office action is in response to amendment filed 5/9/2003 (paper no. 9).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-8, 13 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris et al. (US PAT. 6,009,336 hereinafter Harris) in view of Hull et al. (US PAT. 5,806,005 hereinafter Hull).

Regarding claim 1, Harris discloses a communication device (104) as shown in figure 1 for voice communication and image transmission and reception comprising a camera unit including a camera (188) and image DSP (152) for digitally capturing an image of an object, constructing the image in a predetermined format, compressing the formatted image and storing the compressed image in a camera memory (153) under a predetermined camera control (col. 4 lines 24-44 and col.5 lines 60-67), a portable phone unit (108) having a controller (118) for providing overall control to the communication device and selectively performing voice communication and image transmission/reception of at least one image according in a selected transmission mode among predetermined mode (col. 6 lines 25-49 and col. 9 line 17 through col.12 line 37), a display (184) for displaying external images produced by the camera unit and character produced by the portable phone unit (figures 8-9 and col. 5 lines 52-59) and an interface (112) between the portable phone unit (108) and the display (184) for displaying image and characters on the display under the control of the portable phone unit (col. 6 lines 3-11). Although Harris does not specifically teach the interface comprising an OSD controller and a selector for selectively displaying camera mode output and phone mode output depending on current operational mode, Harris clearly discloses the controller capable of being configured to

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control the display of characters, i.e., soft-keys (202-204), and downloaded background image received from the portable phone unit at a specific position of a currently-display external images on the display in synchronization with signal received from the camera unit as shown in figure 8 and selectively output an external image signal received from the camera unit and on screen display signal received from the controller (figures 8-9 and col. 9 line 44 through col.12 line 37). Thus, it would have been obvious to modify the interface further comprising the OSD controller and the selector in order to make separable of the controller's functions, thereby reduces the work load of the controller. In addition, Harris differs from the claimed invention in not specifically teaching to transmit/receive at least one image in an electronic mail. However, Hull teaches a portable image transfer system for transmitting image in a format as electronic mail in order to improve portable image capture system (col. 1 lines 26-57 and col. 2 lines 38-44). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Harries in transmission/reception of at least one image included in electronic mail when the communication operates in camera mode, as per teaching of Hull, because it improves the portable image capture system.

Regarding claim 2, Harris clearly discloses the communication device comprising a key pad having a plurality of keys that interface with the portable phone unit and a plurality of keys that interface with the camera unit for use in photographing and reproducing an image (figures 2 and 6, col. 9 lines 22-25 and col. 12 lines 5-8).

Regarding claim 3-4, Harris discloses the keys related with the camera unit including a shutter key (133) for capturing an object image on the frontal of the communication device (figure 6) and a camera on/off switch. Although Harris does not specifically teaches the keys

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related with the camera unit including a play key, a mode key for selecting a camera environment, and an enter key for setting a camera environment selected by the mode key, it is old and notoriously well known in the art of digital camera having additional camera related function keys, i.e., a play key, a mode key, and an enter key, in order to make user friendly. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Harries in having additional camera related function keys at the communication device in order to make user friendly.

Regarding claim 5, Harris discloses modes selected by mode keys including data function mode (204) and a display function mode (205) as shown in figure 2. It would have been obvious of modify Harris in further comprising a delete function mode and a sensitivity function mode in order to enhance the communication device for providing additional operation modes.

Regarding claim 6, although Harris does not specifically teaching the photography key and the camera on/off switch providing on the side of the communication device, it is old and well known in the art of shifting locations of keys in a communication device in order to make user friendly.

Regarding claim 7, although Harris does not specifically discloses the communication device including a flip so that the mode key, the shutter key and the enter key are exposed when a flip is folded in the communication device, it is old and well known in the art of portable communication device comprising a flip for protecting a housing and exposing several function keys even though the flip is folded for making user friendly in performing operations. Thus, it would have been obvious to modify the communication device of Harris including a flip for

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protecting the housing and exposing several function keys even though the flip is folded for making user friendly in performing operations.

Regarding claim 8, Harris teaches the camera unit (188) as shown in figure 1, which obviously comprises lens. Note while the camera unit and the display are movable as shown in figure 13 so that the camera can be adjusted at an upper portion of the rear surface of the communication device.

Regarding claim 13, Hull teaches the portable image transfer system comprising a memory unit having programs, i.e., an operation program and an application program, data function, an Internet protocol inclusive of a protocol connect to a point to point (PPP) protocol server and a protocol needed over an Internet over an 'Internet, a radio link protocol for establishing a radio link and a communication protocol (col. 2 line 38-62).

Regarding claim 15, Harris teaches to convert the digitally captured image to a MPEG format, compressing the formatted image data, storing the compressed image data in the camera memory and decompressing the stored image data under a predetermined read control (col. 4 lines 23-60). Although Harris does not specifically teach to convert the digitally captured image to a JPEG format, it is old and notoriously well known in the art of using different compression standards, i.e., MPEG, JPEG, H.261, H.262, H.263, etc. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Harris and Hull in converting the digitally captured image into the JPEG format in order to compatible with different compression standards.

Regarding claim 16, the limitations of the claim are rejected as the same reasons set forth in claim 1. In addition, Harris teaches to use a cellular communication for transmission and

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reception of voice and images to and from the portable composite communication terminal (col. 2 line 55 through col. 3 line 8) so that it recognizes the communication system including a mobile communication network and a server connected to the mobile communication network for providing transmission and reception service of image data..

6. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris et al. (US PAT. 6,009,336 hereinafter Harris) in view of Hull et al. (US PAT. 5,806,005 hereinafter Hull) as applied in claims above, and further in view of Oiwa (JP 06233295A).

Regarding claims 9-11, Harris teaches the power supply (121) of the second housing including the camera unit and the display unit capable of being regulated by the power supply (113) of the portable phone controller (col. 3 lines 26-39). Although the combination of Harris and Hull does not specifically teach to control a battery power voltage to be supplied to the camera unit and/or display unit when a user turns in the camera on/off switch, it is old and notoriously well known in the art of controlling on or off of a power source in a camera in order to reduce power consumption, for example see Oiwa (abstract). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Harris and Hull in controlling the battery power voltage to be supplied to the camera unit as well as the display unit, when a user turns in the camera on/off switch, as per teaching of Oiwa, in order to reduce power consumption.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harris et al. (US PAT. 6,009,336 hereinafter Harris) in view of Hull et al. (US PAT. 5,806,005 hereinafter Hull)

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as applied in claim 1 above, and further in view of Gerszberg et al. (US PAT. 6,044,403 hereinafter Gerszberg).

Regarding claim 14, the combination of Harris and Hull differs from the claimed invention in not specifically teaching the application program including a voice dialing, character recognition, game information and game function. However, Gerszberg teaches an application program including voice dialing, character recognition, game information management and game function (col. 11 lines 12-25, col. 18 lines 14-20, col. 24 lines 17-30 and col. 25 lines 29-39). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Harris and Hull in having the application program including a voice dialing, character recognition, game information and game function, as per teaching of Gerszberg, because it makes user friendly by providing a vast array of new services.

8. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris (US PAT. 6,009,336 hereinafter Harris) in view of Oiwa (JP 06233295A).

Regarding claim 17, Harris discloses a communication method of operating a communication device (104, figure 1) having one controller (118, figure 1), the communication device which functions as both a portable phone and a camera comprising the steps of setting a portable phone mode (700, figure 7) by tuning on the communication device, regulating voltage supporting components of the portable phone mode, and performing a general portable phone function (col. 9 lines 17-32), setting a camera mode (706, figure 7) upon user request for camera operation, said user request being input through a camera mode switch (205, figure 2) and

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processed by the controller, regulating voltage supporting components of the camera mode and performing a camera function (col. 10 lines 33-46 and col. 11 lines 39-58), capturing the image of an object upon user for a photograph in the camera mode (col. 12 lines 5-12) and display a captured image stored in a camera memory of the communication device on a display of the communication device upon user request for displaying the image (col. 12 lines 20-23). Although Harris does not specifically teach to set the camera mode by turning on the camera, it is old and notoriously well known in the art of controlling on or off of a power source in a camera in order to reduce power consumption, for example see Oiwa (abstract). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Harris in setting the camera mode by turning on the camera upon user request for camera operation, as per teaching of Oiwa, in order to reduce power consumption.

Regarding claims 18-19, Harris teaches the communication device having two housings (108 and 110, figure 1) such that a first housing having a first power supply (113) for supplying a first voltage to the communication device when the portable phone mode is set, and a second housing having a second power supply for supply a second voltage to the camera unit when the camera mode is set (col. 3 lines 25-40 and col. 9 lines 6-35).

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harris et al. (US PAT. 6,009,336 hereinafter Harris) in view of Hull et al. (US PAT. 5,806,005 hereinafter Hull) and Sugiyama et al. (US PAT. 5,696,315 hereinafter Sugiyama).

Regarding claim 20, Harris discloses a communication method for a communication device (104), which functions as both a portable phone and a camera comprising the steps of

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entering a first E-mail transmission sub-mode upon user request for E-mail transmission while operating in a portable phone mode, the first E-mail transmission sub-mode performing a portable phone function, camera mode for capturing and displaying an image most recently captured, and transmitting the address of the other party and a message received through a user interface in the first E-mail transmission sub-mode (figure 11, col. 10 lines 6-32 and col. 11 lines 8-34). Harris differs from the claimed invention in not specifically teaching to enter a second E-mail transmission sub-mode upon user request for E-mail transmission while operating a display sub-mode, the second e-mail transmission sub-mode displaying an image of most recently captured in a camera mode, and transmitting the address of the other party and the message received through the user interface and the image display on the display as an E-mail in the second E-mail transmission sub-mode. However, Hull teaches a portable image transfer system for transmitting image in a format as electronic mail to a server station during camera operation mode, which obviously comprising the step of transmitting the address of the other party and the message received through the user interface and the image display of the display as an E-mail (col. 2 lines 20-30 and col. 3 line 17-34) so that it improves portable image capture system. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Harries in entering the second E-mail transmission sub-mode upon user request for E-mail transmission while operating a display sub-mode, the second e-mail transmission sub-mode displaying an image of most recently captured in a camera mode, and transmitting the address of the other party and the message received through the user interface and the image display on the display as an E-mail in the second E-mail transmission sub-mode, as per teaching of Hull, because it improves the portable image capture system. Furthermore,

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neither Harris nor Hull teaches to use scroll key for sequentially displaying other images stored in the memory. However, Sugiyama teaches to use scroll key to cause a plurality of images stored in a memory sequentially displaying on a monitor in order to simplify in operation (col. 11 lines 38-42). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Harris and Hull in using scroll key for sequentially displaying other images stored in the memory, as per teaching of Sugiyama, in order to simplify in operation.

Response to Arguments

10. Applicant's arguments with respect to claims 9-11 and 17-19 have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's arguments filed 6/3/2003(paper no. 12) have been fully considered but they are not persuasive.

In response to applicant's argument that the combination of Harris and Hull fails to show the interface to selectively display camera mode output and phone mode output depending on current operation mode, it appears that Harris clearly discloses the controller capable of being configured to control the display of characters, i.e., soft-keys (202-204), and downloaded background image received from the portable phone unit at a specific position of a currently-display external images on the display in synchronization with signal received from the camera unit and selectively output an external image signal received from the camera unit and on screen display signal received from the controller (figures 8-9 and col. 9 line 44 through col.12 line 37).

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Thus, it would have been obvious to make separable of the controller in modifying the interface of the communication device including an OSD controller and a selector for selectively displaying camera mode output and phone mode output depending on current operation mode, thereby reduce the work load of the controller.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In addition, Harris clearly teaches the communication terminal capable of entering note mode, i.e., e-mail transmission sub-mode, upon user request for sending mode, i.e., e-mail transmission, while operating in a portable phone mode, the first e-mail transmission sub-mode performing a portable phone function (figure 11, col. 10 lines 6-32 and col. 11 lines 8-34). Thus, the combination of Harris, Hull and Sugiyama teaches the claimed limitations.

Conclusion

12. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, V.A., Sixth Floor (Receptionist).

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Eng whose telephone number is 703-308-9555. The examiner can normally be reached on Tuesday to Friday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A. Kuntz, can be reached on (703) 305-4870. The fax phone number for the organization where this application or proceeding is assigned is 703-308-6306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



George Eng

Examiner

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